TITLE OF THE INVENTION

SUPPORT METHOD, PROGRAM AND SUPPORT APPARATUS FOR
TRANSITION BETWEEN PORTABLE TELEPHONE COMPANIES

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates generally to
a support method, program and support apparatus
for transition between portable telephone
companies in number porting which switches the
portable telephone company retaining the same
telephone number and, more particularly, to a
support method, program and support apparatus for
transition between portable telephone companies
strongly supporting transition of various
services already contracted other than primary
communication service.

2. Description of the Related Arts

Traditionally, telephone numbers of
portable telephone terminals are handled as
possessions, and therefore, number porting, in
which transition to another communication
carrier is performed without changing the
telephone number, is impossible. However,
recently, due to increasing competition of
portable telephone services, needs for
introducing the number portability system in

which the communication cattier can be easily
switched without changing the telephone number
have been increased, and since in each country in
Europe and United States and others, similar
system is already introduced, and domestically,
studies for the introduction at government level
are implemented, the introduction will be
achieved at some future time.

However, if number porting, in which a user
can use the same telephone number as before in the
case of switching a communication cattier, is
achieved, the user must conclude a contract for
ending utilization with a communication cattier
before transition and a contract for utilization
with a communication cattier after transition,
and for various services to which the user
subscribed before transition, must contract
again with each service company after transition
and must notify the communication carrier after
transition of a payment financial institution for
the utilization fee, taking time and effort in its
own way. Therefore, it is contemplated that
communication carriers build support systems
with computers for easily achieving the number
porting by users. But, since the number porting
by users has no merit for the communication
carrier before transition, it seems unlikely that

the carrier will actively support the burden of the user, and there is no other choice than building a service basically shouldered by users. For the communication carrier after transition, there is merit of new subscriptions due to the transition, but for various services other than the telephone number, processes will be easier and more reliable by making these services handled as new contracts rather than making services before transition continued. Therefore, if the number porting by users is achieved as a system, it is not necessarily expected that the support system is established from the user's standpoint as long as depending on the communication carriers. As a result, despite presence of many users who want to transit to another portable telephone company for the reason that, for example, the fee and others become cheaper, in fact, it is expected to continue using the portable telephone company currently contracted, avoiding efforts to search various after-transition services equivalent to the services contracted before transition and conclude a contract again, and in order to eliminate this, it is desirable to build a system in which transition of services associated with the number porting can be performed smoothly.

SUMMARY OF THE INVENTION

According to the present invention there is provided a computer-based support method, program and support apparatus for transition between portable telephone companies, which are built by a service operating organization independent from the communication carriers and which enable the user's service environment before transition to be continued after transition.

The present invention provides a support method for transition between portable telephone companies using a computer. The support system of the present invention comprises a transition request reception step which receives a request for transition between portable telephone companies from a customer terminal; a determination step which determines whether a customer is qualified or not; an after-transition service information presentation step which, if it is determined that the customer is qualified, presents information about an after-transition service equivalent to a service contracted before transition and about the contract to the customer terminal; and a service contract step which receives contract information for the after-transition service from the customer terminal to conclude the contract, the service

contract step notifying the customer terminal of the result. In this case, the service contract step includes, after conclusion of the contract, sending a program for performing environment setting of the contracted services to a portable telephone terminal of the customer. The determination step includes, if it is determined that the customer is qualified, notifying a computer in an after-transition portable telephone company of the result of the determination to start the service. The after-transition service information presentation step includes, if a service before transition is available continuously, presenting information on a continuing contract with a service company, the after-transition service information presentation step including, if the service before transition is unavailable continuously, presenting information on a new contract with another service company equivalent thereto. The support method for transition between portable telephone companies of the present invention takes the form that the support computer (support server) intervenes between the user terminal and the computer of the communication carrier to perform support processes, but the process with the user terminal

may be performed via the computer of the communication carrier. In other words, the interactions with the customer terminal in the transition request reception step, the determination step, the after-transition service information presentation step and the service contract step may be performed such that the computer of the portable telephone company which is the destination of transition exits in between.

The present invention provides a program for the support of transition between portable telephone companies. The program is operable to cause a computer supporting transition between portable telephone companies to execute a transition request reception step which receives a request for transition between the portable telephone companies from a customer terminal; a determination step which determines whether a customer is qualified or not; an after-transition service information presentation step which, if it is determined that the customer is qualified, presents information about an after-transition service equivalent to a service contracted before transition and about the contract to the customer terminal; and a service contract step which receives contract information for the after-transition service from the customer

terminal to conclude the contract, the service contract step notifying the customer terminal of the result.

The present invention provides a support apparatus for transition between portable telephone companies. The support apparatus comprises a transition request reception unit which receives a request for transition between portable telephone companies from a customer terminal; a determination unit which determines whether a customer is qualified or not; an after-transition service information presentation unit which, if it is determined that the customer is qualified, presents information about an after-transition service equivalent to a service contracted before transition and about the contract to the customer terminal; and a service contract unit which receives contract information for the after-transition service from the customer terminal to conclude the contract, the service contract unit notifying the customer terminal of the result.

According to the present invention, in the case that a request for transition between portable telephone companies is received from a user terminal, if it is determined that the transition is available, by searching and

presenting the services equivalent to the various services contracted before the transition to a user to be able to be selected, it is possible to reduce a burden of the user due to the contract termination, continuation or new contract associated with transition of the various services, and the transition of the various services can be performed smoothly in connection with the transition of the portable telephone terminal, and therefore, the transition between the portable telephone companies through the number porting can be activated. Since support processes for the transition between the portable telephone companies accompanied by the number porting are provided by an operating organization independent from the portable telephone companies, it is possible to provide the support service from the user's standpoint without being influenced by interests of the portable telephone companies, to assure equal competition opportunity for the portable telephone companies and to promote activation of the portable telephone market associated with the introduction of the number portability system.

The above and other objects, features and advantages of the present invention will become more apparent from the following detailed

description with reference to the drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is an explanatory diagram of a support system for transition between portable telephone companies according to the present invention;

Fig. 2 is an explanatory diagram of hardware environment of a computer used for the support server of Fig. 1;

Fig. 3 is an explanatory diagram of the customer management file of Fig. 1;

Fig. 4 is an explanatory diagram of the service map file of Fig. 1;

Figs. 5A and 5B are time charts showing a support process in transition between portable telephone companies of the present invention;

Fig. 6 is an explanatory diagram of a series of operation screens for number porting utilizing a regular portable telephone terminal;

Fig. 7 is an explanatory diagram of a series of operation screens for number porting using a portable telephone terminal corresponding to the present invention;

Fig. 8 is a flowchart of a customer terminal process for performing number porting;

Fig. 9 is a flowchart of an after-transition portable telephone company process to number porting from a customer terminal;

Fig. 10 is a flowchart of a support server process according to the present invention;

Fig. 11 is a flowchart of a service transition information edit process performed in the support server process of Fig. 10;

Figs. 12A and 12B are time charts of a support process of an embodiment in which the support server directly interacts with the customer terminal;

Fig. 13 is a flowchart of a support server process of Figs. 12A and 12B; and

Fig. 14 is a flowchart of an after-transition portable telephone company process of Fig. 13.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Fig. 1 is an explanatory diagram of a support system for transition between portable telephone companies, associated with number porting, according to the present invention. In Fig. 1, the support process of transition between portable telephone companies according to the present invention is provided by a support server 10. It is desirable that the support server 10 is managed by any operating organization independent from a plurality of the portable telephone companies (communication carriers), and the support process will be operated from the neutral position to both users, or customers, and

the portable telephone companies. To the support server 10, portable telephone terminals 14 are connected via portable telephone network; customer personal computer terminals 18 are connected via the internet 16; a fixed telephone 22 and a facsimile 24 are connected via a telephone fax server 20; and the support process associated with the number porting can be requested to the support server by the use of any of these customer terminals. To the support server 10, portable telephone company servers 26a to 26d are also connected, and as represented and shown by the portable telephone company servers 26a, terminals of distributors 28 are connected. The support server 10 is provided with a communication control unit 30 and a support processing unit 32. The communication control unit 30 performs communication control for exchanging information between various customer terminals and the portable telephone company server 26a, 26b. The support processing unit 32 is achieved by functions of application programs for the support process and provided with each function of a transition request reception unit 34, a customer determination unit 36, an after-transition service information presentation unit 38 and a service contract unit 40. To this support

processing unit 32, a customer management file 42 and a service map file 44 are respectively connected as databases. The transition request reception unit 34 provided in the support processing unit 32 receives a request for transition between portable telephone companies from the customer terminal. This request for transition between portable telephone companies is a transition request associated with the number porting. This transition request associated with the number porting from the customer terminal is sent to the support server 10 and also sent to the after-transition portable telephone company server at the same time. The transition request from the user terminal to the portable telephone company server may be sent directly, or via the support server. When the request for transition between portable telephone companies associated with the number portal is received, the customer determination unit 36 searches the customer management file 42 and determines whether it is good customer or not. The standard of whether it is good customer or not is, for example, absence of delinquency in payment of the utilization fee as a general rule and, in addition, that the customer exceeds a certain level defined by the frequency of utilization and others. If the

customer determination unit 36 determines that
the customer is qualified as a transition customer
due to the number porting, or as the good customer,
the after-transition service information
presentation unit 38 presents information on the
after-transition services equivalent to the
services contracted before transition and
contracts thereof to the requesting customer
terminal. The service contract unit 40 receives
contract information for the after-transition
services based on the information presented by the
after-transition service information
presentation unit 38 from the customer terminal,
concludes contracts and notifies the
after-transition portable telephone company
server, for example, the portable telephone
company server 26a, of results thereof. After
concluding the contracts with service companies
based on the information for the after-transition
services from the terminal customer, the service
contract unit 40 also sends a program for setting
environment of the contracted services to the
portable telephone terminal 14 of the customer who
enters into the contracts. Therefore, on the
customer side, at the time of the operation for
starting the service from the after-transition
portable telephone company, for example, the

activating operation by inputting the code number notified by the after-transition portable telephone company, the environment setting program for the contracted services, which is sent from the support server 10 to be loaded, is activated, and it is possible to automatically perform the environmental setting necessary for the contracted services which are contracted after transition. If the before-transition service can be utilized continuously after transition, the after-transition service information presentation unit 38 also presents information on the continuing contract with the service company, and if the before-transition service can not be utilized after transition, it will present information on equivalent service companies and new contracts to the side of the customer terminal. The support server 10 of Fig. 1 is achieved by hardware resources of a computer such as shown in Fig. 3, for example.

In the computer of Fig. 2, a bus 101 of CPU 100 is connected with RAM 102, a hard disk controller (software) 104, a floppy disk driver (software) 110, a CD-ROM driver (software) 114, a mouse controller 118, a keyboard controller 122, a display controller 126 and a communication board 130. The hard disk controller 104 is connected

with a hard disk drive 106 and loaded with
application programs which execute the support
processes for transition between portable
telephone companies associated with the number
porting request, and calls a necessary program
from the hard disk drive 106 at startup of the
computer, deploys the program on RAM 102 and
executes it with CPU 100. The floppy disk driver
110 is connected with a floppy disk drive
(hardware) 112 and can read from and write to a
floppy disk (R). The CD-ROM driver 114 is
connected with a CD drive (hardware) 116 and can
read data and programs stored in CD. The mouse
controller 118 transfers input operations of a
mouse 120 to CPU 100. The keyboard controller 122
transfers input operations of a keyboard 124 to
CPU 100. The display controller 126 performs the
display on a display unit 128. The communication
board 130 uses a communication line 232 including
wireless to communicate with other apparatuses on
the internet.

Fig. 3 is an explanatory diagram of the
customer management file 42 provided in the
support server of Fig. 1 and shows a file for one
(1) person as an example. In the customer file
of Fig. 3, item numbers 1 to 10 are the attribute
information of the customer, and a customer ID,

a phone number, a subscriber name, a subscriber address, a user name, a user address, a user fixed phone number, a good customer information, a terminal number and a mail address are registered. Following these, item numbers 11 to n are the contents information of the services other than the communication service utilized by the customer, and it is possible to register, for example, payment account, route search, weather, news, fortunetelling, bank, tickets, ····, taxi and others. The portable telephone company servers 26a to 26d is also provided with a similar customer management file as a database.

Fig. 4 is an explanatory diagram of the service map file 44 provided in the support server 10. In the service map file 44, for item numbers 1 to n, route search, weather, news, fortunetelling, bank, ticket, ···· and taxi are registered in this example. For each contents group name, a service provider and communication carriers, or telephone companies, in which the service is available, as well as an incentive and a commercial message are provided. For example, taking the contents name "route search" as an example, "FJ-navi" and "EKI-spert" are present as the service companies in this example, and for six (6) companies of A co., B co., C co., D co., E co.

and F co., which are present as the communication carrier, "YES" is registered if the service can be provided, and "NO" is registered if the service is not supported. Therefore, if the after-transition portable telephone company, or communication carrier, associated with the number porting can be identified, it is possible to know whether the service before the transition can be continued or not, and if it can not be continued, the contents group (service) available after the transition can be obtained.

Figs. 5A and 5B are time charts showing a support process for a customer terminal 11 as the portable telephone terminal 14 of the support server 10 of Fig. 1 and the after-transition portable telephone company server 26 associated with the number porting, according to the present invention. First, the customer terminal 11 notifies of the number porting (transition request) in step S1. In this example, the notification of the number porting is performed respectively for the after-transition portable telephone company server 26 and the support server 10 provided according to the present invention. When receiving the number porting request from the customer terminal 11 in step S101, the portable telephone company server 26 queries the support

server 10 whether the requesting customer is a good customer or not. On the other hand, when the support server 10 receives the number porting request from the customer terminal 11 in step S201, it searches the customer management file 42 such as shown in Fig. 3 and reads the good customer information thereof in step S202. Subsequently, in response to the query from the portable telephone company server 26, it determines and notifies whether a good customer or a disqualified customer in step S203. In step S103, the portable telephone company server 26 determines whether a good customer or not based on the notification from the support server 10, and if the customer is not a good customer, it proceeds to step S104 to notify the customer terminal 11 of disapproval of the transition. If the customer is a good customer, it proceeds to step S105 to notify the company's exchange system of utilization and start the communication service. On the other hand, at this stage, the support server 10 edits service transition information including information on after-transition services equivalent to before-transition services and the contracts thereof by searching the service map file 44 such as shown in Fig. 4 and performs notification in step S204. Therefore, in step

S106, the portable telephone company server 26 sends the service transition information received from the support server 10 to the customer terminal 11, along with a reception acknowledgement to the customer terminal 11. The customer terminal 11 selects and notifies of the service company with which the user contracts after viewing the service transition information received from the portable telephone company server 26 in step 3. This selection of the contract service company includes selection for the continuing contract and selection for the new contract. The notification based on the service companies to be contracted from the customer terminal 11 is sent to the support server 10 via the portable telephone company server 26, and in response to this, the support server 10 concludes contracts with the selected service companies and notifies the portable telephone company server 26 and the customer terminal 11 of the results in step S205 as well as registers in the customer management file 42 in step S206. The portable telephone company server 26 registers results of contracts with the service companies in the customer management file. Since a series of processes of transition between portable telephone companies associated with the number

porting is completed, the customer terminal 11 terminates the process in response to the display of completion of the procedure and start of utilization in step S4.

Fig. 6 is an explanatory diagram of a series of operation screens working with the support process of the present invention in the number porting utilizing a regular portable terminal. In Fig. 6, first, an operation screen 48 is opened, and "option setting" shown as an item 54 is selected from this, for example. Since an option setting screen 50 is opened by this, "number porting" which is an item 56 is selected from the menu. In this way, a number porting screen 52 is opened, and names of companies after switching are indicated along with radio buttons in the screen. By selecting "ou" as the company after switching as shown by the radio button 58 and pushing a transmit button 60, the notification of the number porting in step S1 in the customer terminal 11 of Figs. 5A and 5B will be performed to the after-transition portable telephone server 26 and the support server 10. For the processes of step S2 to S4 in the customer terminal 11 of Figs. 5A and 5B in the case that these regular portable telephones are used, since there is no application corresponding to the support process of the

present invention, interactions with the
customer terminal 11 utilizing a mail function
will be performed, for example.

Fig. 7 is an explanatory diagram of a series
of operation screens in the number porting using
a portable telephone terminal which has the
application corresponding to the support process
of the present invention. In Fig. 7, when the
application for the number porting is opened in
the portable telephone terminal 14 corresponding
to the present invention, an operation screen 62
is opened as a default screen, and after selecting
the request of the number porting by a radio button
63, telephone number before transition is input,
and a transmission button is pushed.
Subsequently, the screen is switched to a stand-by
screen 64, and if the support server 10 determines
that the user is a good customer, an operation
screen 66 is displayed, and completion of the
reception of the number porting is notified.
Since execution of service setting can be enabled
or not, a radio button 67 is operated, and the
transmission button is pushed. Based on this, an
edit process of after-transition service
information is performed in the support server 10,
and after-transition service information 70 is
created to be sent to the portable telephone

terminal 14. For this after-transition service

information 70, the scrolling display is

performed on an operation screen 68, and therefore,

the user determines services desired while

opening the contents group names which are types

of services in sequence. As the after-transition

service information, there are two (2) types,

which are:

(1) continuing service; and

(2) new services due to unavailability of

continuation.

Therefore, as the after-transition service

information, in the case that the service can be

continued, the service company is displayed, and

simultaneously, services which have merits for

the customer is additionally displayed. In this

way, the customer can not only continue using the

same service, but also select the service which

is equivalent but has further merit. After a

series of selection for the after-transition

service information on the operation screen 68 is

completed, by pushing the transmission button,

contract information for the selected service

company is sent to the support server 10, and after

the contract process is conducted, an operation

screen 72 is displayed concurrently with

completion of the contract. On the operation

screen 72, contents of the contracted services are displayed, and a series of processes associated with the number porting is terminated with this.

Fig. 8 is a flowchart of the portable terminal process executing the process of transition between portable telephone companies associated with the number porting of Figs. 5A and 5B, which consists of following process procedures.

Step S1: The number porting is notified to the after-transition portable telephone company, and a telephone number "XXXX-YYYY-ZZZZ" is notified.

Step S2: After-transition service information provided from the support server 10 is presented to the terminal.

Step S3: Services are select based on the after-transition service information, and the contract information is returned.

Step S4: After receiving results of the contracts, the services are started.

Fig. 9 is a flowchart showing the process procedures of the after-transition portable telephone company server to the number porting from the customer terminal 11 of Figs. 5A and 5B, which is as follows.

Step S1: A request of the number porting and a telephone number "XXXX-YYYY-ZZZZ" is received

from the customer terminal through distributors, the internet or others.

Step S2: The support server is queried whether it is a good customer or not.

Step S3: If it is a good customer, the procedure proceeds to Step S4, and if it is not a good customer, the procedure proceeds to Step S8.

Step S4: Since it is a good customer, registration in the customer management file is performed for accepting the number porting.

Step S5: the company's exchange system is notified of utilization by the use of the telephone number of the accepted number porting, and the communication service is started.

Step S6: The after-transition service information from the support server is presented to the customer terminal, and the results of the contracts are received, which is based on the notification of the contract information to the support server 10 in conformity with the selection of the services from the customer terminal which views this service information.

Step S7: In a customer management system, information of the services for which the contracts are concluded is registered in the customer management file.

Step S8: This is the case that it is not a good customer in step S3, and disapproval of transition is notified to the customer terminal, and the process is terminated.

Fig. 10 is a flowchart showing process procedures of the support server 10 of the invention which executes the process of Figs. 5A and 5B, which is as follows.

Step S1: A request of the number porting and a telephone number "XXXX-YYYY-ZZZZ" is received from the customer terminal through distributors or the internet.

Step S2: The customer management file 42 is searched.

Step S3: If determined from the search result of the customer management file 42 that it is a good customer, the procedure proceeds to Step S4, and if it is not a good customer, the procedure proceeds to Step S8.

Step S4: The after-transition portable telephone company is notified that it is a good customer.

Step S5: A service transition information edit process is executed, in which, for the customer who performs the number porting request received in step S1, the information on the after-transition services equivalent to the

services contracted before transition and the contracts thereof is edited.

Step S6: The service transition information is notified to the customer terminal via the portable telephone company server.

Step S7: A service contract request sent from the customer terminal is received via the portable telephone company server, and after contract processes with the service companies are performed, the results are notified to the portable telephone company server and the customer terminal and registered in the customer management file 42, and the process is terminated.

Step S8: This is the case that it is not a good customer in step S3, and the after-transition portable telephone company server is notified that it is a disqualified customer to terminate a series of processes.

Fig. 11 is a flowchart showing details of the service transition information edit process in step S5 of Fig. 10, which consists of following process procedures.

Step S1: Service information is edit in the before-transition portable telephone company.

Step S2: The service map file 44 is searched to obtain information of services which can be provided by the after-transition portable

telephone company.

Step S3: Whether the service can be continued or not is checked. If it can not be continued, the procedure proceeds to step S4. If it can be continued, the procedure proceeds to step S5 or step S6. At this point, available continuation 1 is the available continuation when the same service company as before transition is used. On the other hand, available continuation 2 is the case of available continuation when the information of equivalent services which have merits for the customer is added along with the before-transition service information.

Step S4: This is the case that the continuation of the service is not available, and a contract screen of the service companies which provide services equivalent to the before-transition services is edited.

Step S5: This is the case that the continuation of the service is available, and a continuing contract screen of the before-transition service company is edited.

Step S6: This is the case that not only the continuation of the service is available, but also equivalent services which have merits for the customer exist, and for example, a contract screen of the service company during promotion period and

a contract screen of the continuing service company are edited.

Step S7: After any edit process of step S4, S5 and S6 is completed, whether there is an edit process or not is checked for all the contents groups, and if it is not completed, the procedure goes back to step S2, and if it is completed, the process is terminated to return to the main routine of Fig. 10.

Figs. 12A and 12B are time charts of a support process according to the present invention in an embodiment in which the support server 10 directly interacts with the customer terminal 11. More specifically, in the embodiment of Figs. 5A and 5B, the support server performs the support process associated with transition of the number porting with the customer terminal 11 via the portable telephone company server 26, but in the embodiment of Figs. 12A and 12B, the support server 10 is located between the customer terminal 11 and the portable telephone company server 26, such that it performs the support process associated with the number porting between both. In Figs. 12A and 12B, when the notification of the number porting is performed from the customer terminal 11 in step S1, the number porting request is received in step S101 of the support server 10

by this, and simultaneously, the same number
porting request is received in step S201 of the
portable telephone company server 26. The
support server 10 searches the customer
management file 42 in step S102 and determines
whether a good customer or a disqualified customer
in step S103. If it is not a good customer in step
S104, the portable telephone company server 26 is
notified that it is a disqualified customer in
step S105, and then, the customer terminal 11 is
notified of disapproval of transition in step S106.
If determined that it is a good customer in step
S104, this is notified to the portable telephone
company server 26 in step S107. The portable
telephone company server 26 checks the
notification from the support server 10 in step
S202, terminates the process if it is a
disqualified customer, proceeds to step S203 if
it is a good customer, and notifies the exchange
system of utilization to start the service. On
the other hand, the support server 10 notifies
that it is a good customer in step S107 and then
executes the service transition information edit
process in step S108. Details of this service
transition information edit process are the same
as the flowchart of Fig. 11. Subsequently, in
step S109, a reception acknowledgement of the

number porting request and the service transition
information are sent to the customer terminal 11.
The customer terminal 11 selects the service
companies to be contracted by viewing the service
transition information sent from the support
server in step 3 and notifies the support server
10. In response to the notification from the
customer terminal 11, the support server 10
concludes the contracts with the service
companies and notifies the customer terminal 11
and the portable telephone company server 26 of
the results respectively in step S110, registers
the results of the contracts with the
after-transition service companies in the
customer management file 42 in step S112 and
terminates the support process. In response to
the notification of the contract results from the
support server 10, the customer terminal 11
displays completion of the procedure and start of
utilization in step S4, and the process is
terminated. In response to the notification of
the contract results from the support server 10,
the portable telephone company server 26 performs
registration in the company's customer
management file in step S204, and the process is
terminated.

Fig. 13 is a flowchart of the support server

in the embodiment of Figs. 12A and 12B, which is as follows.

Step S1: The number porting and a telephone number are received from the customer terminal through distributors or the internet.

Step S2: The customer management file 42 is searched to obtain information of the customer who performs the number porting.

Step S3: Whether it is a good customer or not is checked from the search result of the customer management file 42. If it is a good customer, the procedure proceeds to step S4, and otherwise, the procedure proceeds to step S8.

Step S4: The after-transition portable telephone company is notified that it is a good customer.

Step S5: The service transition edit process is executed. The details are the same as Fig. 10.

Step S6: The service transition contract information is notified to the customer terminal 11.

Step S7: A service contract request is received from the customer terminal 11, and after the contracts with the service companies are concluded and the results are notified to the customer terminal 11 and the portable telephone company server 26, the registration in the

customer management file 42 is performed, and the process is terminated.

Step S8: This is the case that it is not a good customer in step S3, and the after-transition portable telephone company server 26 is notified that it is a disqualified customer.

Step S9: Disapproval of transition is notified to the customer terminal 11, and the process is terminated.

Fig. 14 is a flowchart showing the process of the portable telephone company server 26 in the embodiment of Figs. 12A and 12B, which is as follows.

Step S1: The number porting and a telephone number are received from the customer terminal 11 through distributors or the internet.

Step S2: A notification of whether a good customer or not from the support server is checked, and if it is a good customer, the procedure proceeds to step S3, and if it is a disqualified customer, the process is terminated.

Step S3: An acceptance of the number porting is registered in the customer management file 42.

Step S4: A notification of utilization to the exchange system is performed to start the communication service.

Step S5: Whether or not the service contract

information for the destination of transition is received from the support server is checked, and if it is received, the procedure proceeds to step S6, and otherwise, the procedure goes back to step S5.

Step S6: Registration in the customer management file is performed, and a series of the processes are terminated.

Although omitted in the flowcharts of Fig. 10 and Fig. 13, the support server 10 will finally send a program for performing the environment setting of the contracted services to the portable telephone terminal of the customer, based on the conclusion of the contracts with the after-transition service companies.

It is to be appreciated that the invention includes any alterations without impairing the object and advantages thereof and that the invention is not limited by the numerical values shown in the above embodiments.